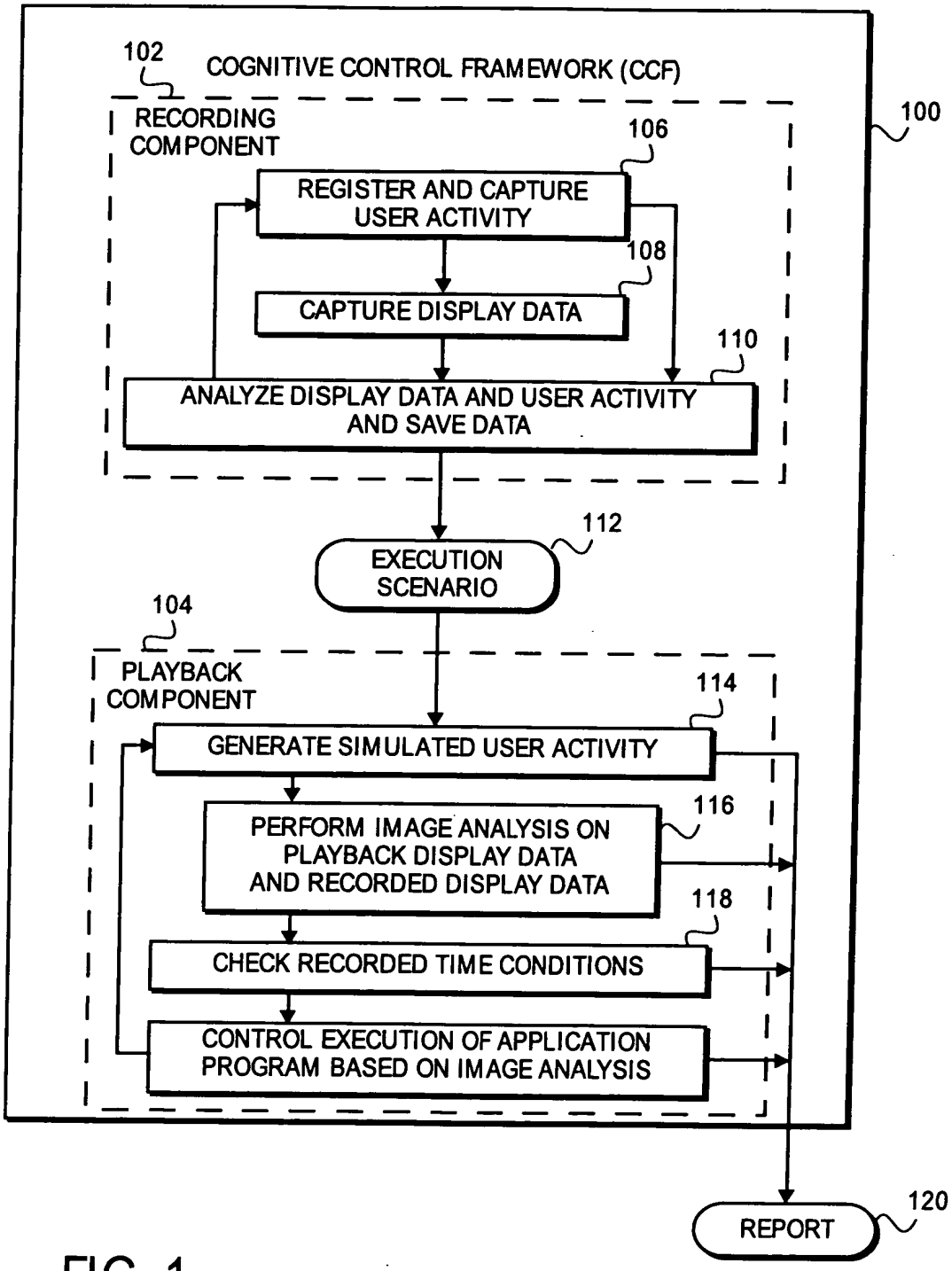

102
COGNITIVE CONTROL FRAMEWORK (CCF)
100
RECORDING COMPONENT
106
REGISTER AND CAPTURE USER ACTIVITY
108
CAPTURE DISPLAY DATA
110
ANALYZE DISPLAY DATA AND USER ACTIVITY AND SAVE DATA
112
EXECUTION SCENARIO
104
PLAYBACK COMPONENT
114
GENERATE SIMULATED USER ACTIVITY
116
PERFORM IMAGE ANALYSIS ON PLAYBACK DISPLAY DATA AND RECORDED DISPLAY DATA
118
CHECK RECORDED TIME CONDITIONS
CONTROL EXECUTION OF APPLICATION PROGRAM BASED ON IMAGE ANALYSIS
120
REPORT

FIG. 1

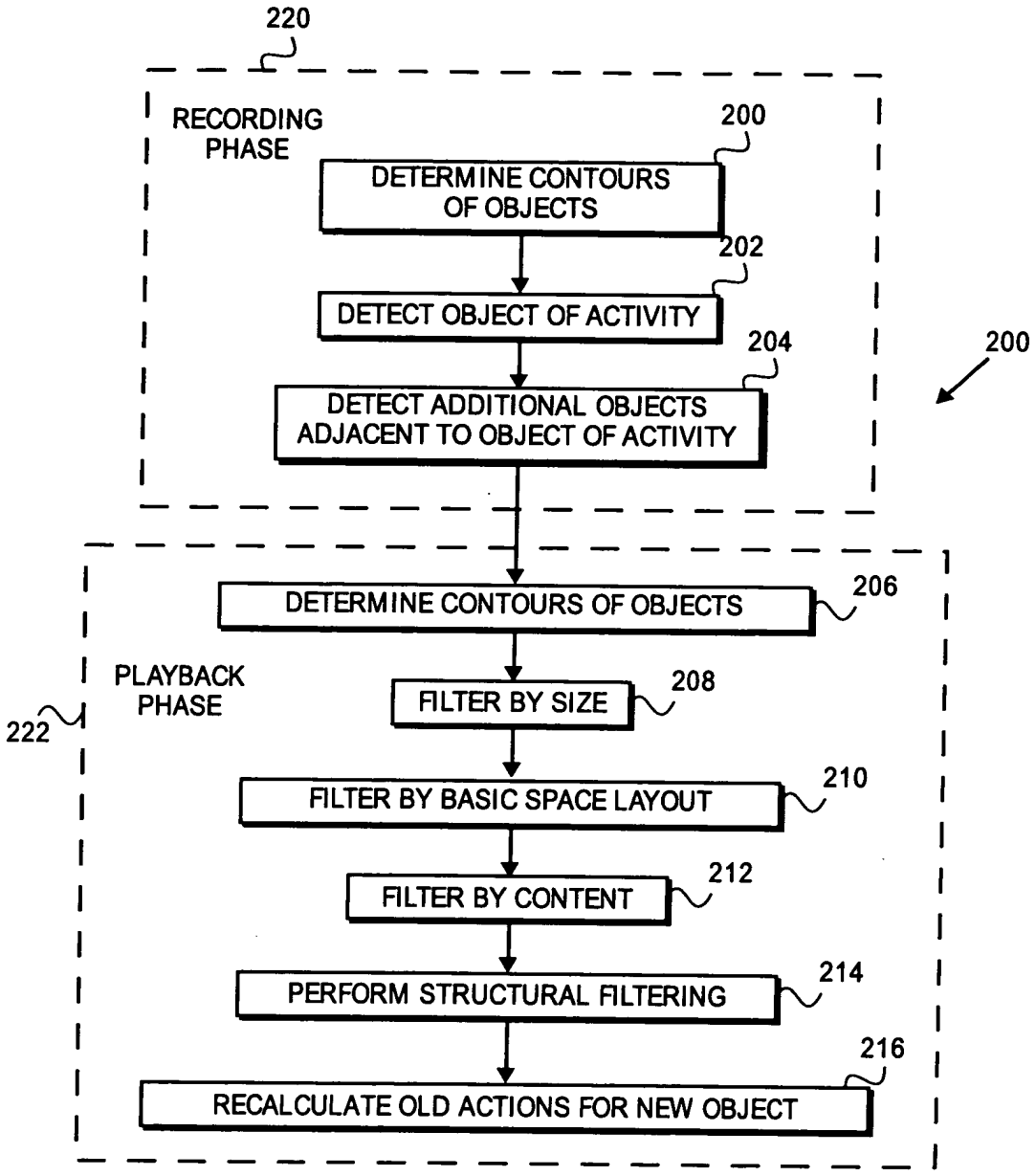

220
RECORDING PHASE
200
DETERMINE CONTOURS OF OBJECTS
202
DETECT OBJECT OF ACTIVITY
204
DETECT ADDITIONAL OBJECTS ADJACENT TO OBJECT OF ACTIVITY
200
DETERMINE CONTOURS OF OBJECTS
206
PLAYBACK PHASE
222
FILTER BY SIZE
208
FILTER BY BASIC SPACE LAYOUT
210
FILTER BY CONTENT
212
PERFORM STRUCTURAL FILTERING
214
RECALCULATE OLD ACTIONS FOR NEW OBJECT
216

FIG. 2

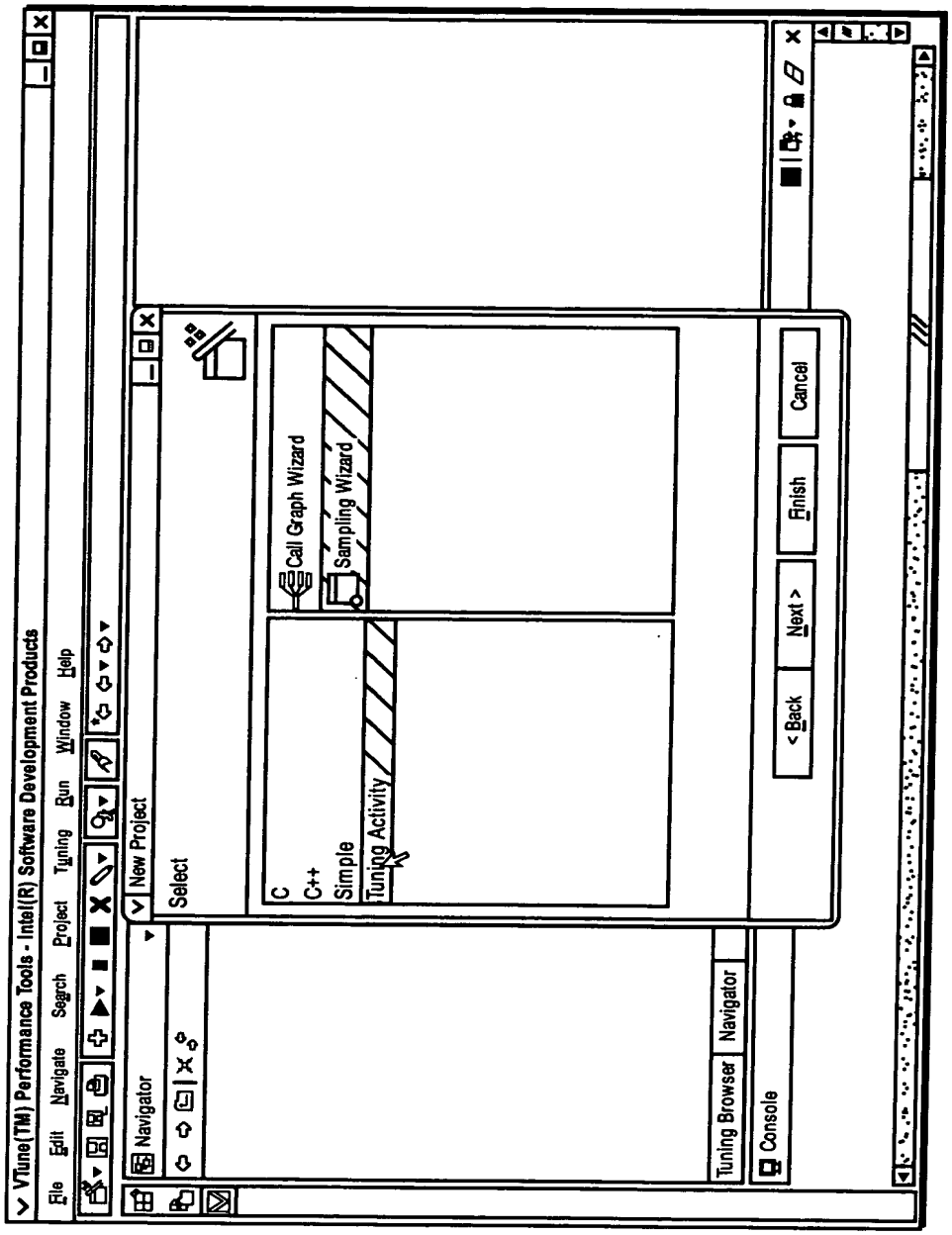

VTune(TM) Performance Tools - Intel(R) Software Development Products
File Edit Navigate Search Project Tuning Run Window Help
Navigator
New Project
Select
C
C++
Simple
Tuning Activity
Call Graph Wizard
Sampling Wizard
< Back
Next >
Finish
Cancel
Tuning Browser
Navigator
Console

FIG. 3

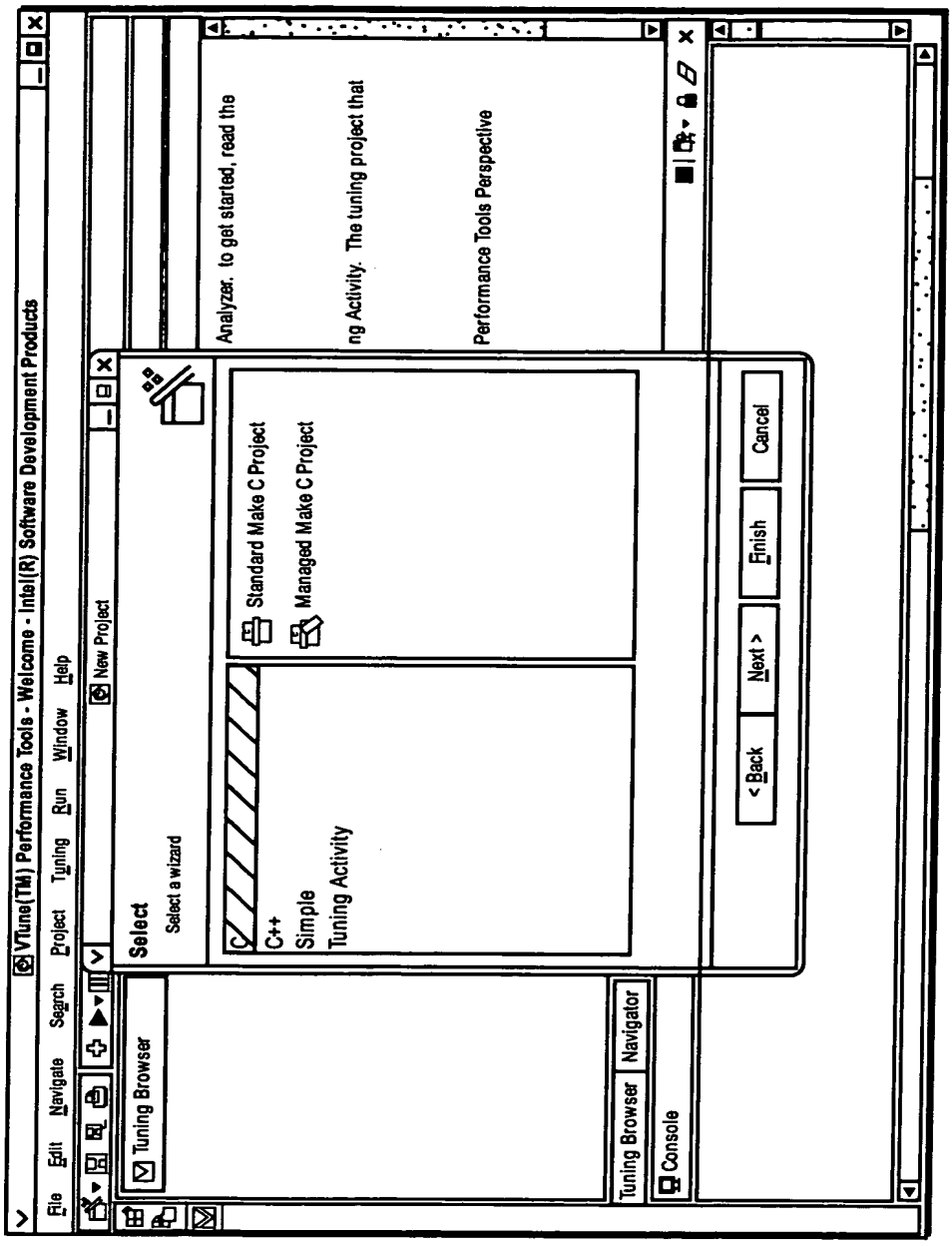
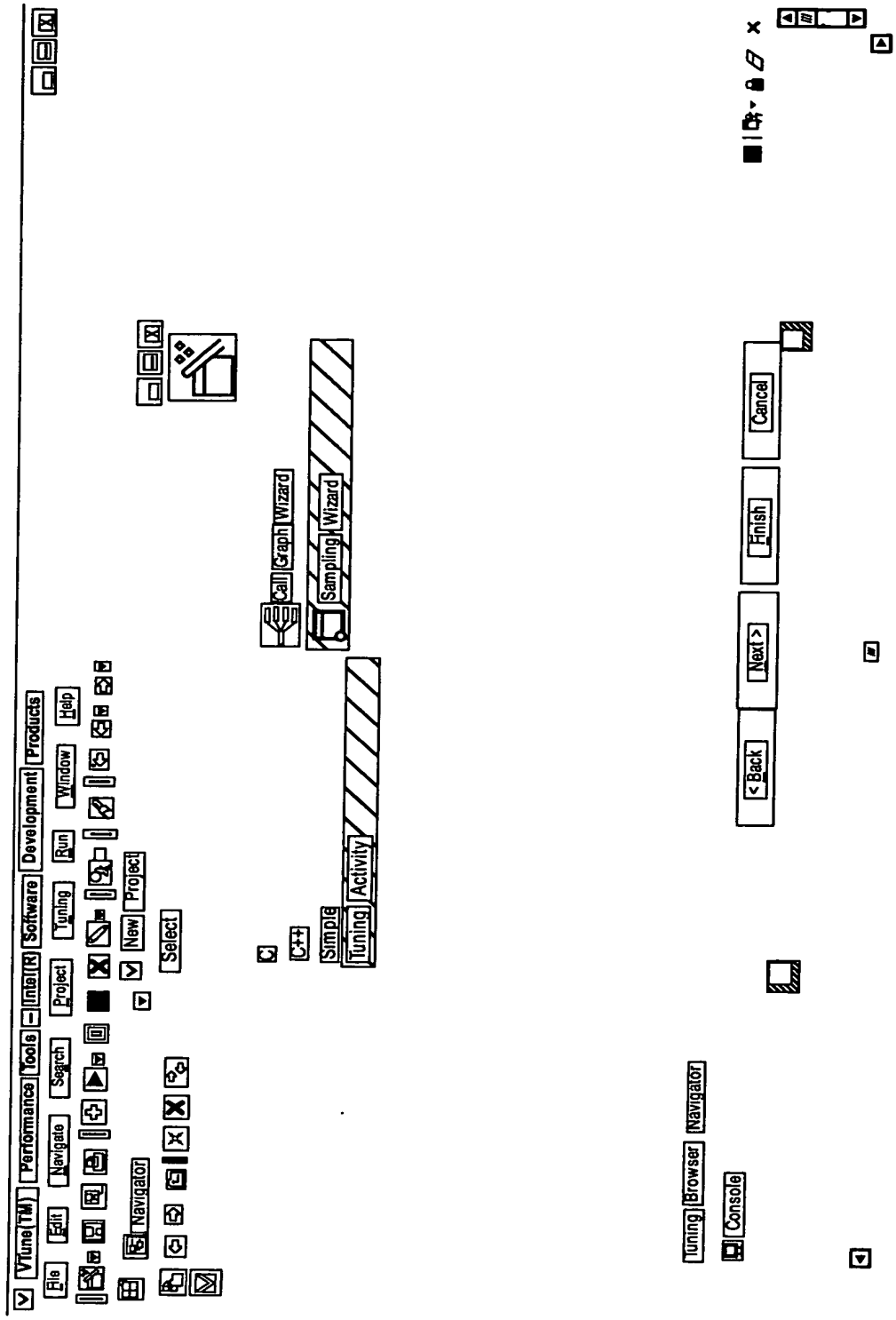

VTune(TM) Performance Tools - Welcome - Intel(R) Software Development Products
File Edit Navigate Search Project Tuning Run Window Help
Tuning Browser
New Project
Select
Select a wizard
Standard Make C Project
Managed Make C Project
C++
Simple
Tuning Activity
Analyzer. to get started, read the
ng Activity. The tuning project that
Performance Tools Perspective
< Back
Next >
Finish
Cancel
Tuning Browser
Navigator
Console

FIG. 4


VTune(TM)
Performance
Tools
Intel(R)
Software
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Project
Select
Navigator
Call Graph Wizard
Sampling Wizard
C++
Simple
Tuning
Activity
< Back
Next >
Finish
Cancel
Tuning
Browser
Navigator
Console

FIG. 5

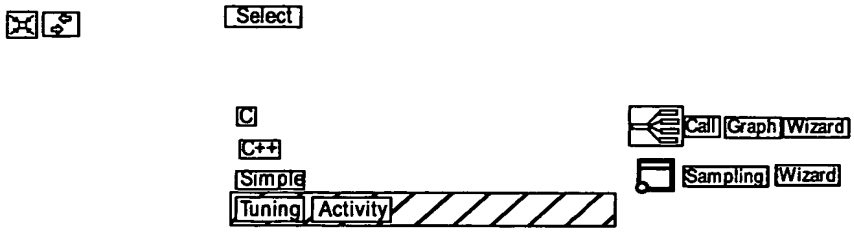
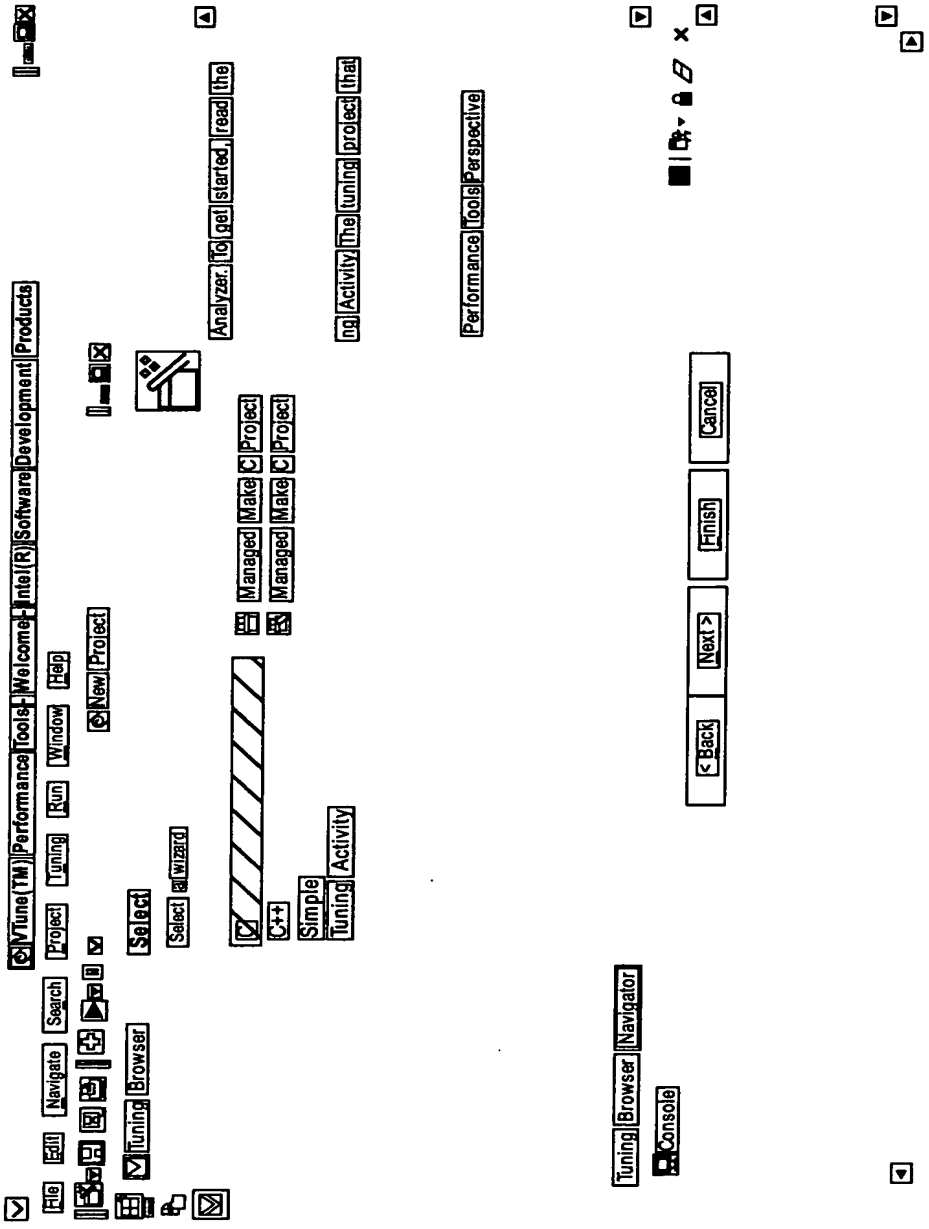

Select
C
C++
Simple
Tuning
Activity
Call
Graph
Wizard
Sampling
Wizard

FIG. 6


VTune (TM) Performance Tools
Welcome
Intel(R) Software Development Products
File
Edit
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Tuning
Run
Window
Help
Tuning
Browser
Select
Select a wizard
New Project
Simple Tuning Activity
C++
Managed Make C Project
Managed Make C Project
Analyzer. To get started, read the
ng Activity. The tuning project that
Performance Tools Perspective
< Back
Next >
Finish
Cancel
Tuning
Browser
Navigator
Console

FIG. 7

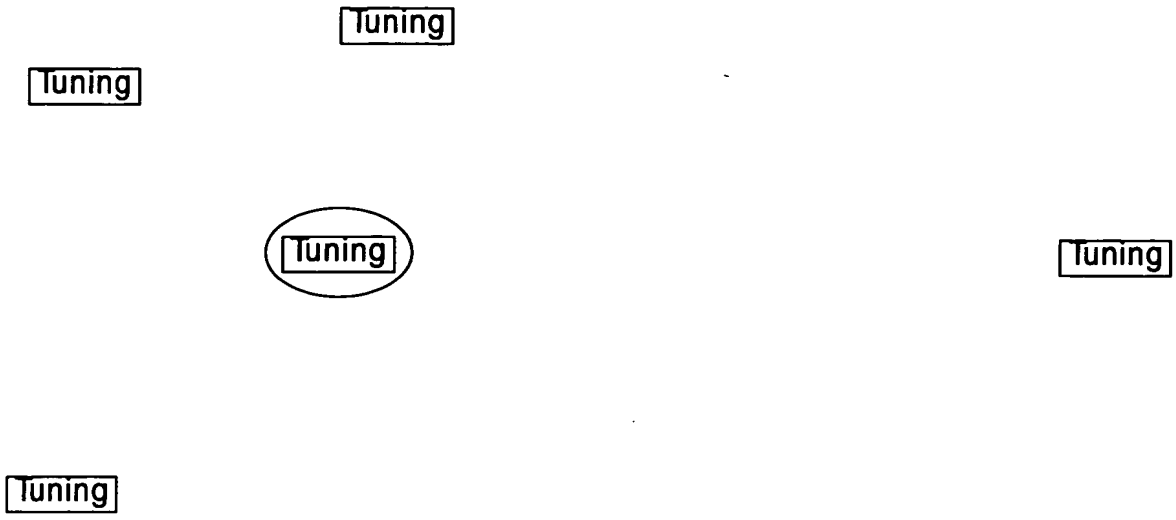


FIG. 8

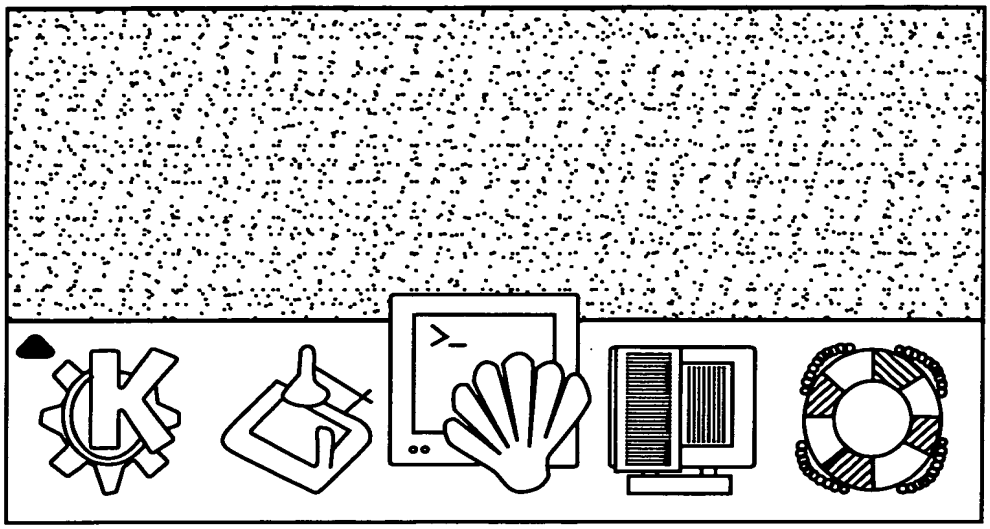

FIG. 9

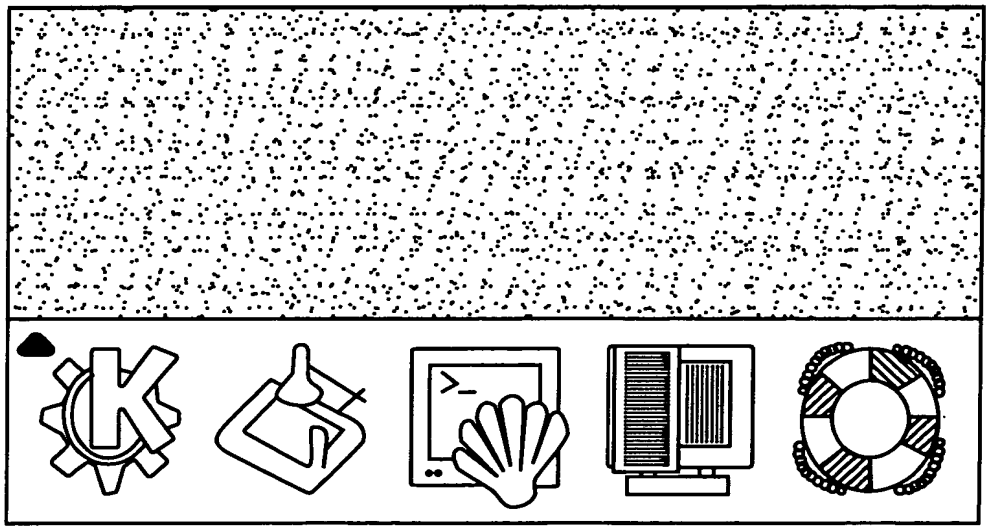

FIG. 10

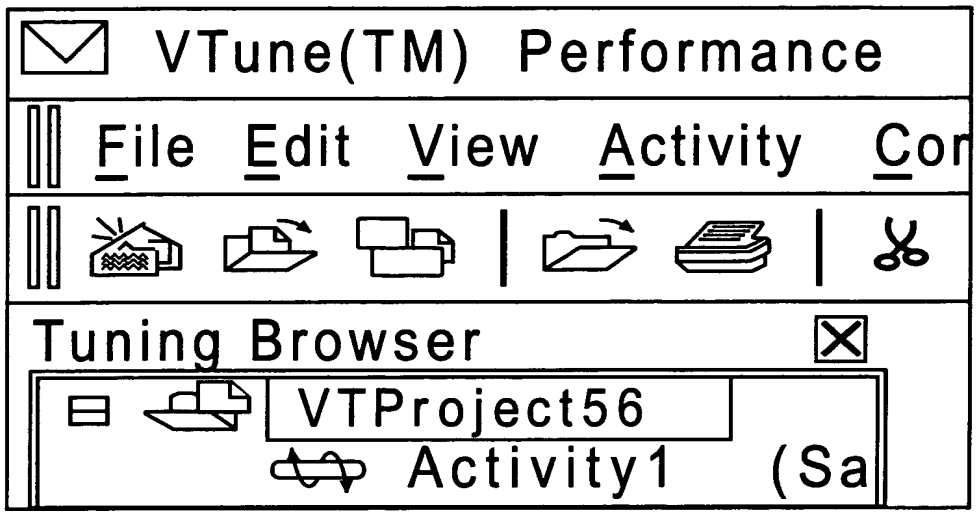
VTune(TM) Performance
File Edit View Activity Cor
Tuning Browser
VTProject56
Activity1 (Sa

FIG. 11

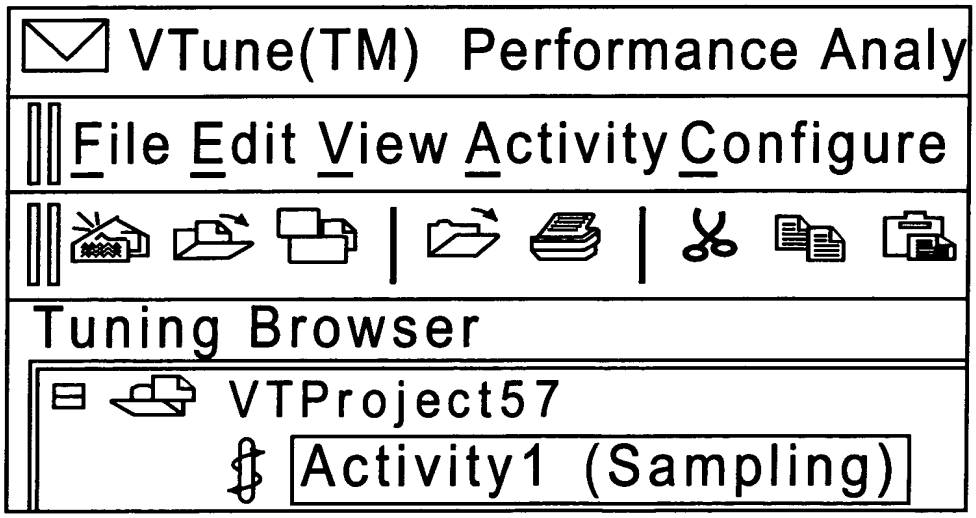
VTune(TM) Performance Analy
File Edit View Activity Configure
Tuning Browser
VTProject57
Activity1 (Sampling)

FIG. 12

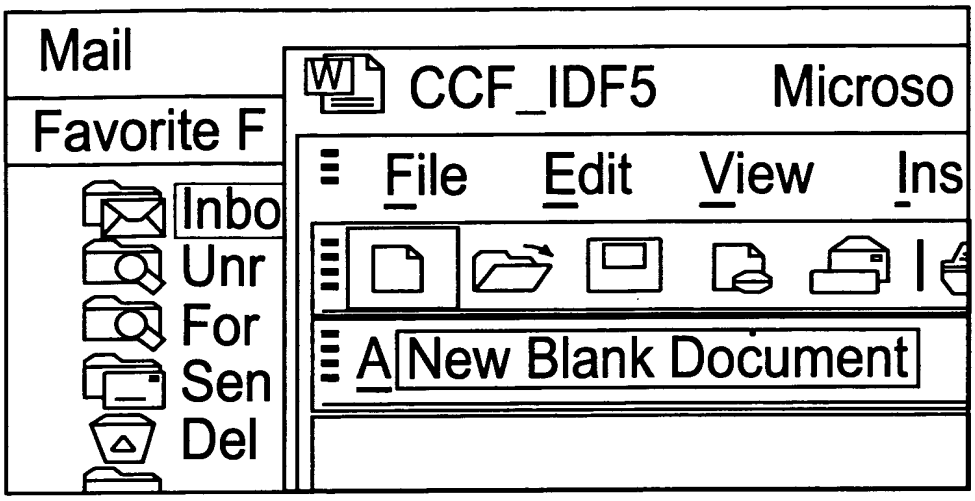
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FIG. 13

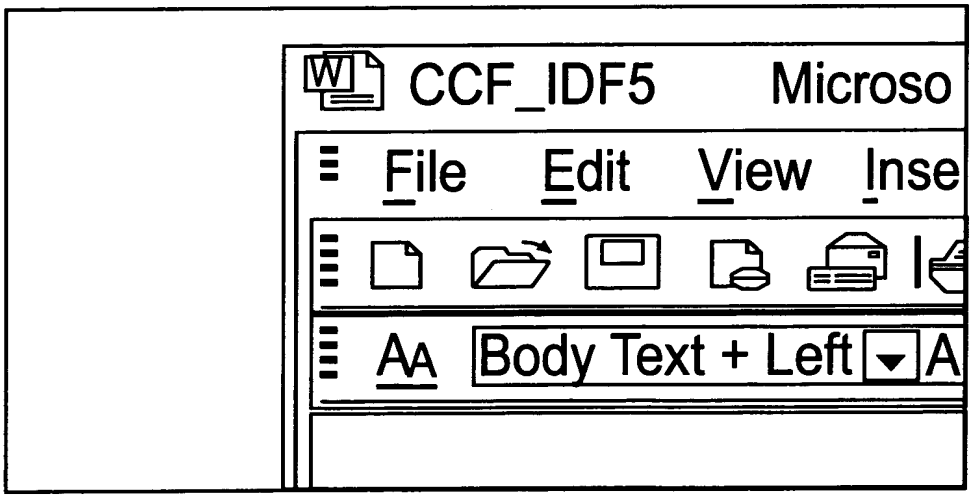
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FIG. 14

| Selection Summary | |
|---|---|
| Events △ | Total |
| Clockticks %(808) | 6.88 |
| Clockticks events(808) | 39.000... |
| Clockticks samples(808) | 26.00 |
| Cycles per Retired Instruction - CPI(808) | 0.57 |
| Instructions Retired %(808) | 19.83 |
| Instructions Retired events(808) | 69.000... |
| Instructions Retired samples(808) | 46.00 |

FIG. 15

| Selection Summary | |
|---|---|
| | Total △ |
| Cycles per Retired Instruction - CPI(808) | 0.57 |
| Clockticks %(808) | 6.88 |
| Instructions Retired %(808) | 19.83 |
| Clockticks samples(808) | 26.00 |
| Instructions Retired samples(808) | 46.00 |
| Clockticks events(808) | 39.000... |
| Instructions Retired events(808) | 69.000... |

FIG. 16

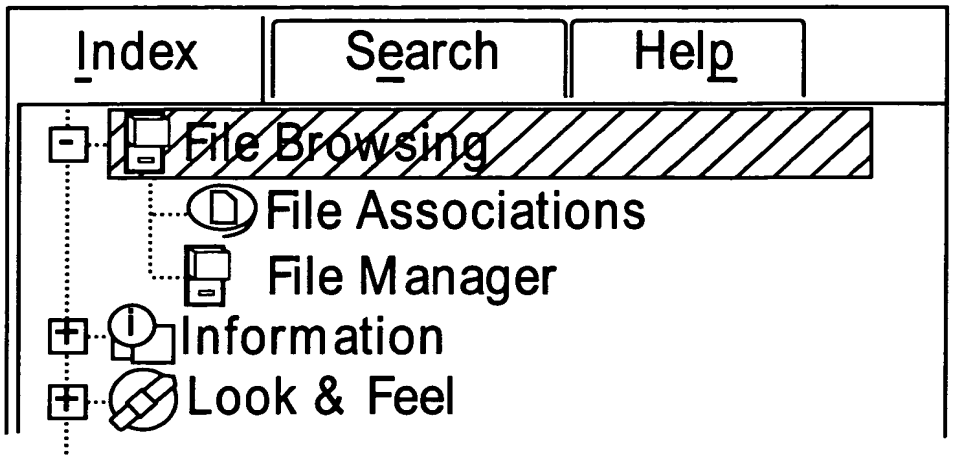

Index
Search
Help
File Browsing
File Associations
File Manager
Information
Look & Feel

FIG. 17

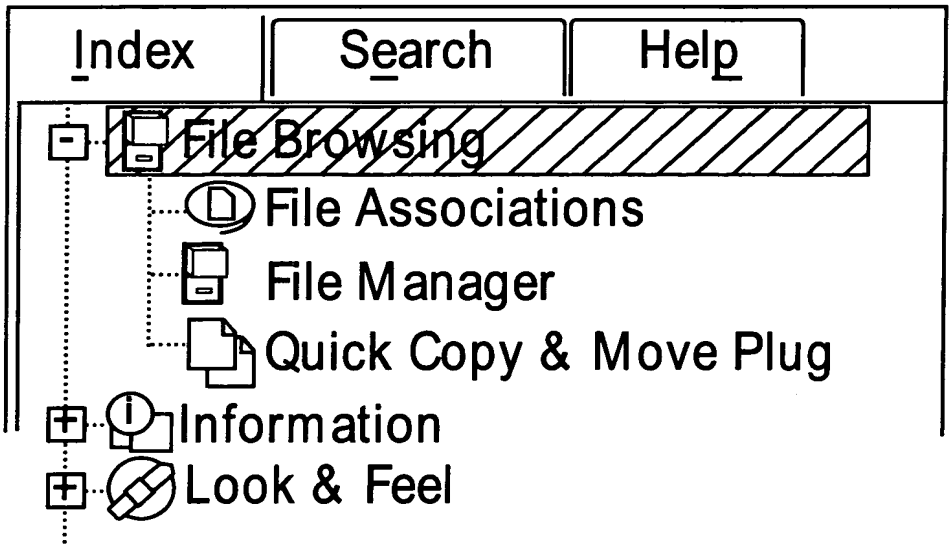
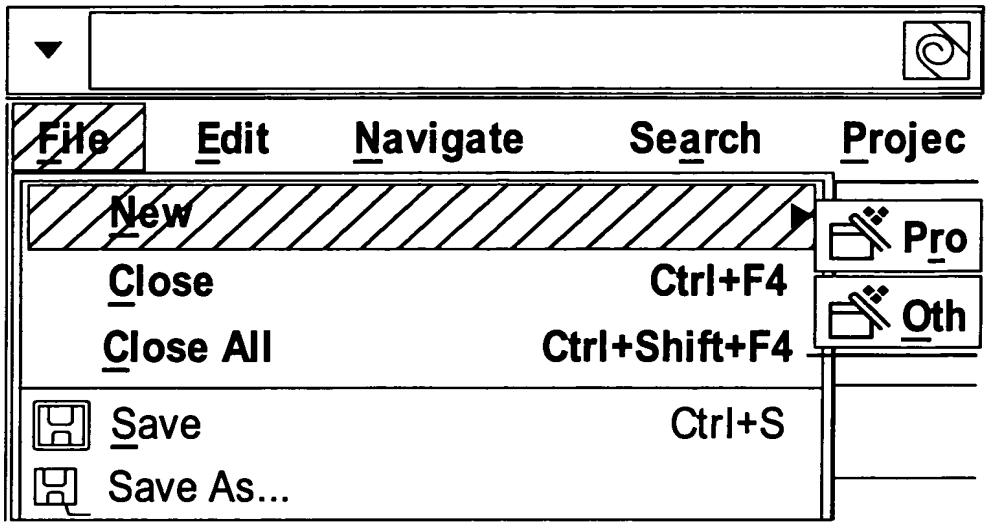

Index
Search
Help
File Browsing
File Associations
File Manager
Quick Copy & Move Plug
Information
Look & Feel

FIG. 18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Ctrl+Shift+F4
Save
Ctrl+S
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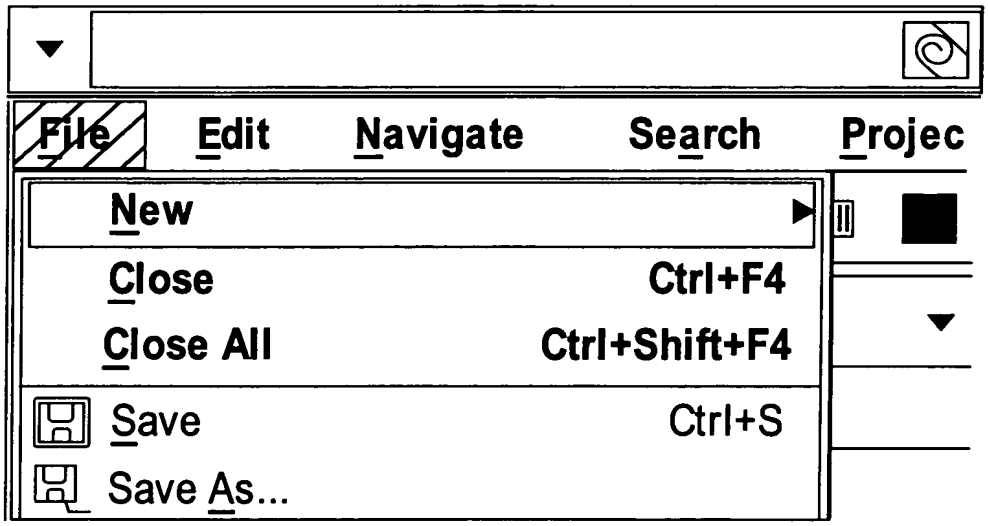
FIG. 19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Ctrl+F4
Close All
Ctrl+Shift+F4
Save
Ctrl+S
Save As...

FIG. 20

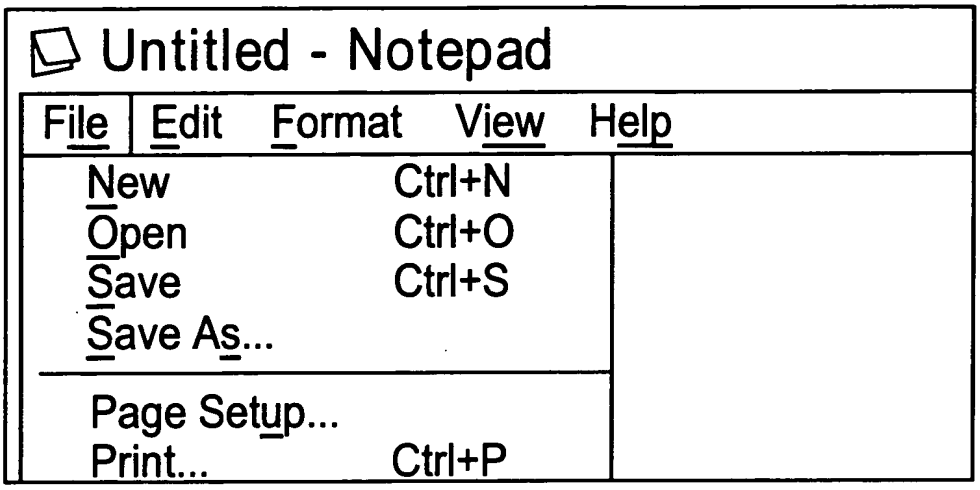


FIG. 21

Selection Summary

| Events | Total |
|---|---|
| Clockticks %(808) | 6.88 |
| Clockticks events(808) | 39.000... |
| Clockticks samples(808) | 26.00 |
| Cycles per Retired Instruction - CPI(808) | 0.57 |
| Instructions Retired %(808) | 19.83 |
| Instructions Retired events(808) | 69.000... |
| Instructions Retired samples(808) | 46.00 |

FIG. 22

| Selection Summary | |
|---|---|
| Events | Total △ |
| Cycles per Retired Instruction - CPI(808) | 0.57 |
| Clockticks %(808) | 6.88 |
| Instructions Retired %(808) | 19.83 |
| Clockticks samples(808) | 26.00 |
| Instructions Retired samples(808) | 46.00 |
| Clockticks events(808) | 39.000... |
| Instructions Retired events(808) | 69.000... |

FIG. 23

| Selection Summary | |
|---|---|
| Events | Total |
| Instructions Retired samples(810) | 9.00 |
| Clockticks samples(810) | 7.00 |
| Instructions Retired events(810) | 13.500... |
| Instructions Retired %(810) | 13.85 |
| Clockticks events(810) | 13.500... |
| Clockticks %(810) | 6.31 |
| Cycles per Retired Instruction - CPI(810) | 0.78 |

FIG. 24

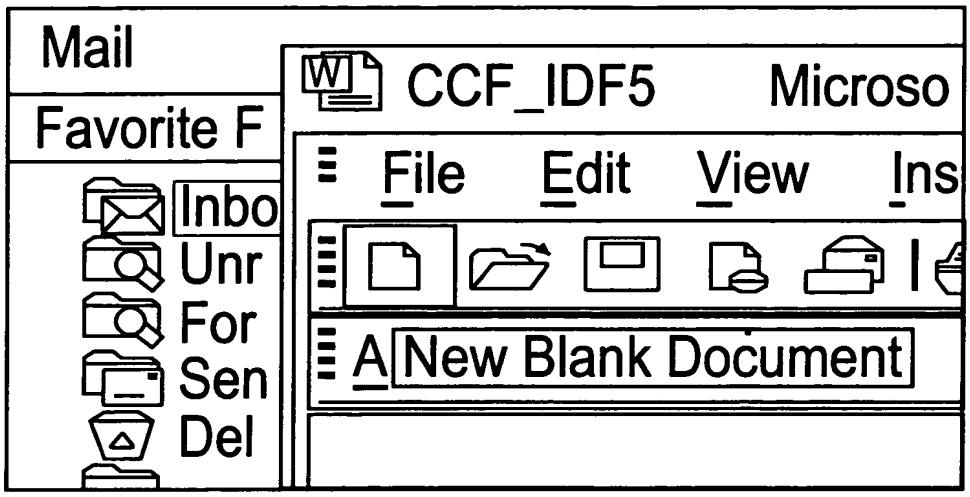
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FIG. 25

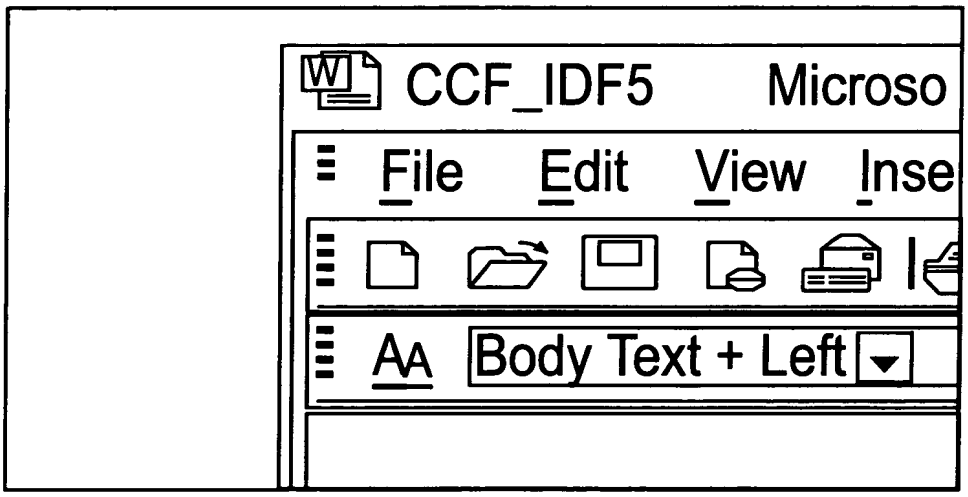
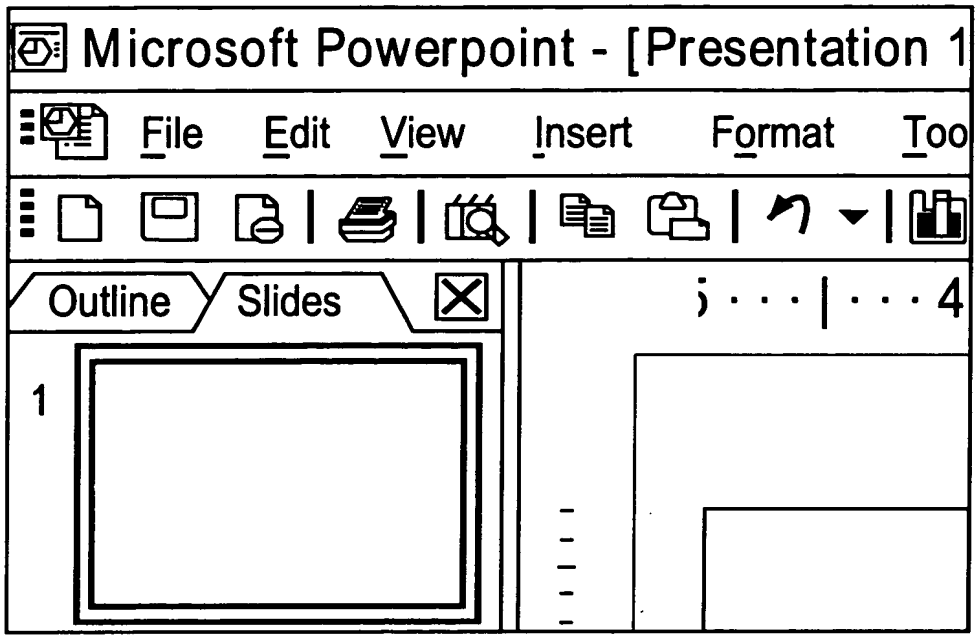

CCF_IDF5 Microso
File Edit View Inse
AA Body Text + Left

FIG. 26


Microsoft Powerpoint - [Presentation 1
File
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Format
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Outline
Slides
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FIG. 27

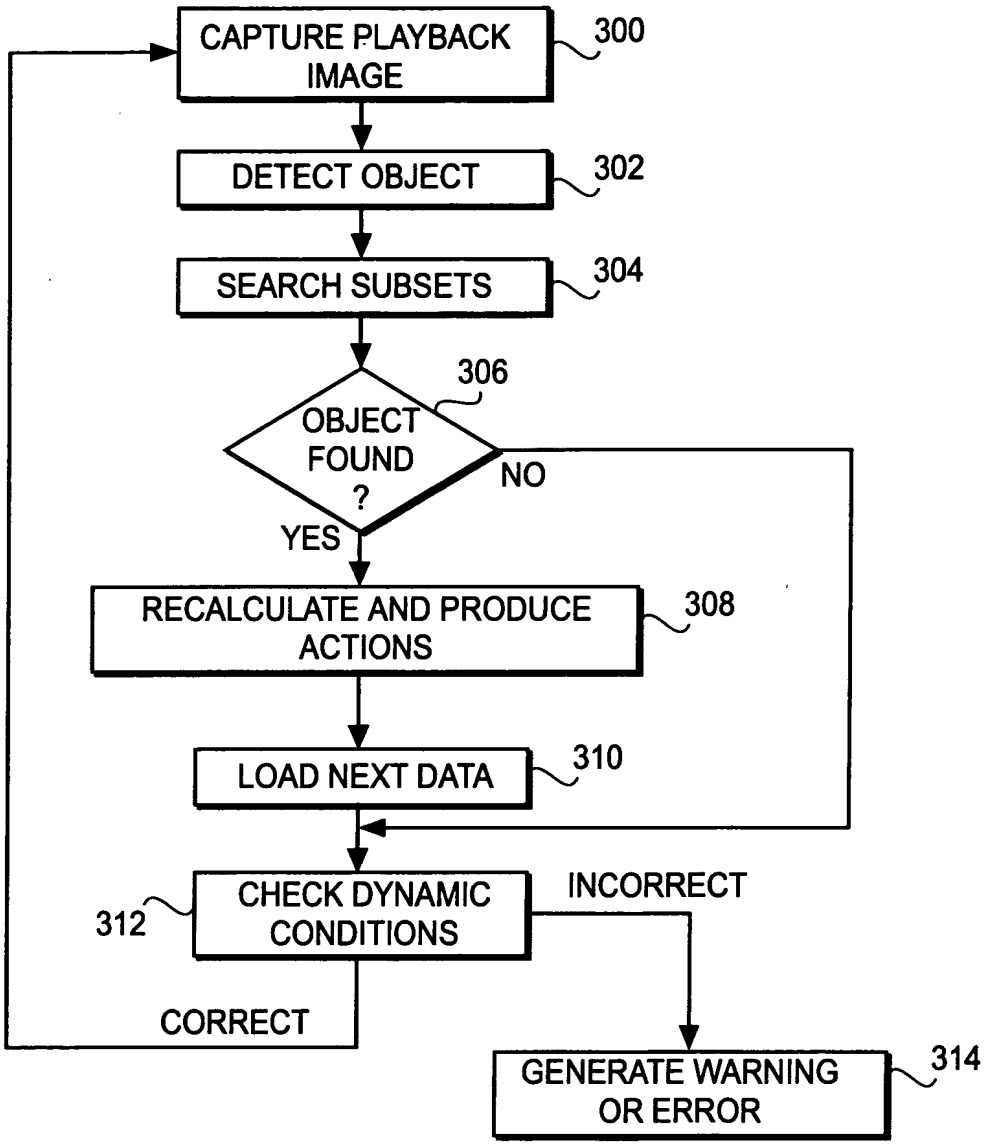
CAPTURE PLAYBACK IMAGE
300
DETECT OBJECT
302
SEARCH SUBSETS
304
306
OBJECT FOUND ?
NO
YES
RECALCULATE AND PRODUCE ACTIONS
308
LOAD NEXT DATA
310
312
CHECK DYNAMIC CONDITIONS
INCORRECT
CORRECT
GENERATE WARNING OR ERROR
314

FIG. 28

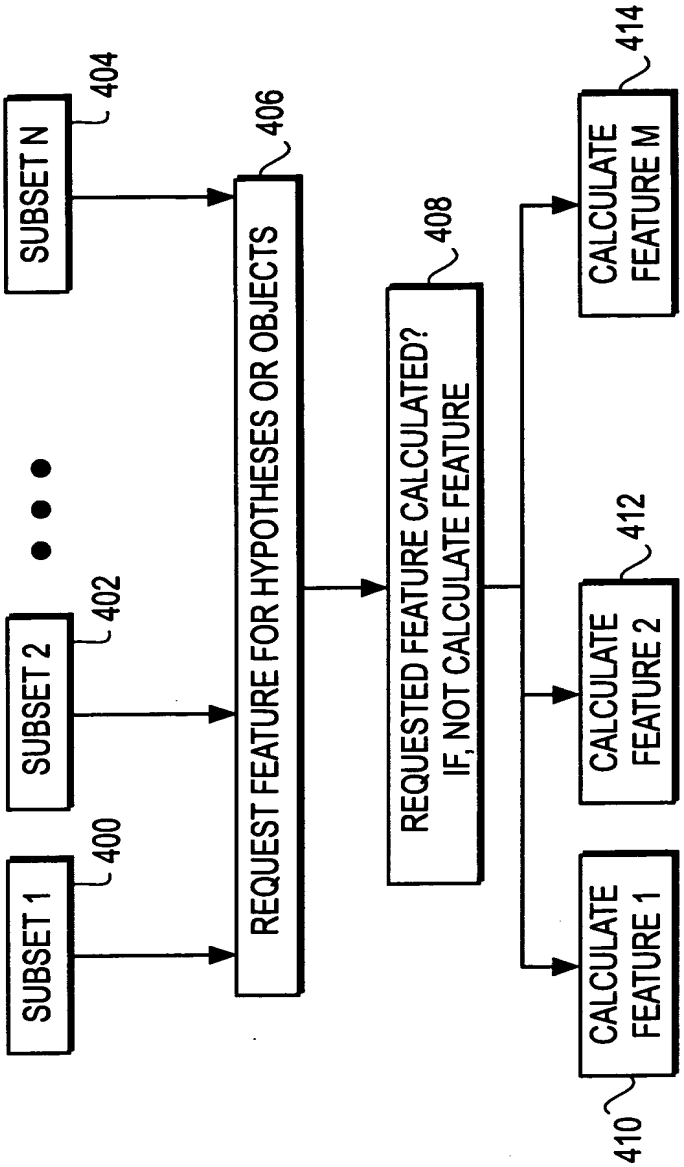
SUBSET 1
400
SUBSET 2
402
SUBSET N
404
REQUEST FEATURE FOR HYPOTHESES OR OBJECTS
406
REQUESTED FEATURE CALCULATED?
IF, NOT CALCULATE FEATURE
408
CALCULATE FEATURE 1
410
CALCULATE FEATURE 2
412
CALCULATE FEATURE M
414

FIG. 29